

Graduate Certificate in Marine Engineering

1 Duration of program

Except with the permission of the Faculty, the Graduate Certificate in Marine Engineering shall be completed in a minimum of one semester or a maximum of four semesters.

2 Admission

2.1 Except as provided for in 2.2 below, an applicant for admission to the program of study for the Graduate Certificate in Marine Engineering shall have qualified for:

a a three year degree from the University of Adelaide in a relevant discipline or a degree of another institution accepted for the purpose by the Faculty as equivalent, and have not less than two years' full-time (or part-time equivalent) work experience in a relevant field,

or

b a four year degree from the University of Adelaide in a relevant engineering discipline from the University, or a degree of another institution accepted for the purpose by the Faculty as equivalent.

2.2 The Faculty may, in exceptional circumstances and subject to such conditions (if any) as it may see fit to impose in each case, accept as a candidate for the Graduate Certificate in Marine Engineering, a person who does not qualify for admission to the program under rule 2.1 above, but has given evidence satisfactory to the Faculty, of fitness to undertake work for the degree.

2.3 Status, exemption and credit transfer

A candidate may not present for credit towards the degree any course which has been presented for any other award of this University or other institution, or which in the opinion of the Faculty is substantially similar to such course. Such a candidate will be required to undertake an alternative course as approved by the Faculty.

3 Assessment and examinations

3.1 There shall be four classifications of pass in any course for the Master Marine Engineering: Pass with High Distinction, Pass with Distinction, Pass with Credit, and Pass. Courses passed with a Conceded Pass classification may not be counted towards the requirements for the degree of Graduate Certificate in Marine Engineering.

3.2 A candidate shall not be eligible to attend for examination unless any prescribed coursework has been completed to the satisfaction of the teaching staff concerned.

3.3 A candidate who fails in a course and desires to take the course again shall again attend the course and satisfactorily do such written and practical work as the teaching staff concerned may prescribe, unless specifically exempted therefrom after written application to the Faculty for such exemption.

3.4 A candidate who has twice failed any course may not enrol for that course again except by special permission of the Faculty and then only under such conditions as may be prescribed.

3.5 For the purpose of this Rule, a candidate who is refused permission to sit for the assessment for a given course, or who without a reason accepted by the Faculty fails to attend all or part of the assessment, shall be deemed to have failed that course.

4 Qualification requirements

4.1 To qualify for the Graduate Certificate in Marine Engineering, a candidate shall satisfactorily complete courses to the value of 12 units, including:

a core courses to the value of 9 units from 4.2.1 (a) or (b)

b elective courses to the value of 3 units from 4.2.2 and 4.2.3.

At least 9 units of study must be taken from courses taught by the University of Adelaide.

4.2 Academic program

4.2.1 Core Courses

a Submarine

University of Adelaide

MECH ENG 7042 Introduction to Submarine Design3

MECH ENG 7046 Submarine Design3

University of South Australia

Systems Engineering for Complex Problem Solving3

or

TECHCOMM 5013 Systems Engineering I+3

+(Only with the permission of the Faculty— Non-ASC students only)

b Naval Ships

University of Adelaide

MECH ENG 7048 Introduction to Naval Ship Engineering3

MECH ENG 7065 Naval Ship Engineering.....	3
University of South Australia	
Systems Engineering for Complex Problem Solving	3
<i>or</i>	
TECHCOMM 5013 Systems Engineering I+	3
+(Only with the permission of the Faculty— Non-ASC students only)	

4.2.2 Elective courses

University of Adelaide

CHEM ENG 7047 Composites and Multiphase Polymers	3
COMP SCI 7076 Distributed Systems ³	
ELEC ENG 7015 Adaptive Signal Processing	3
ELEC ENG 7017 Beamforming and Array Processing.....	3
ELEC ENG 7033 Principles of RF Engineering	3
ELEC ENG 7046 Power Quality & Fault Diagnosis	3
ENG 7048 Principles of Control Systems	3
ELEC ENG 7049 Power Electronics Systems.....	3
ELEC ENG 7054 Detection, Estimation and Classification.....	3
ELEC ENG 7055 Antennas and Propagation.....	3
ELEC ENG 7065 Sonar Sensors & Systems	3
ELEC ENG 7069 Electrical Energy Systems	3
MECH ENG 7020 Materials Selection & Failure Analysis	3
MECH ENG 7023 Fracture Mechanics ³	
MECH ENG 7025 Topics in Welded Structures	3
MECH ENG 7026 Advanced Topics in Fluid Mechanics	3
MECH ENG 7027 Engineering Acoustics.....	3
MECH ENG 7030 Advanced Vibrations	3
MECH ENG 7034 Advanced Digital Control.....	3
MECH ENG 7043 Stresses in Plates and Shells.....	3
MECH ENG 7045 CFD for Engineering Applications	3
MECH ENG 7047 Dynamics and Control	3
MECH ENG 7059 Finite Element Analysis of Structures	3
MECH ENG 7061 Corrosion: Principles and Prevention	3
ELEC ENG 7023 Satellite Communications	3
MECH ENG 7072 Special Studies in Marine Engineering	3
MECH ENG 7049 Marine Engineering Research Project A&B	12
APP MTH 7075 Fluid Mechanics	3
TECHCOMM 5021 Applied Project Management I#	3
TECHCOMM 7029 Systems Engineering II	3

4.2.3 Other approved elective courses

ACA

Coatings Engineering	3
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Australian Maritime College

Design of Marine Machinery Systems.....	3
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Curtin University

Physical and Acoustical Oceanography	3
Marine Acoustics.....	3

RMIT

Risk and Technology Decisions#	3
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UniSA

Electromagnetic Compatibility.....	3
Military Systems - Operational and Technological Integration	3
Requirements Engineering.....	3
Principles of Test Evaluation N	3

#Students can undertake one of either Applied Project Management 1 or Risk and Technology Decisions

4.2.4 The availability of courses is conditional on the availability of staff and facilities and sufficient enrolments.

4.3 Unacceptable combination of courses

No candidate will be permitted to count towards an award any course, together with any other course, which, in the opinion of the Faculty concerned, contains a substantial amount of the same material; and no course or portion of a course may be counted twice towards an award.

4.4 Graduation

Subject to Chapter 89 of the Statutes, candidates who have satisfied the requirements for any award of the University shall be admitted to that award.

5 Special circumstances

When in the opinion of the relevant Faculty special circumstances exist, the Council, on the recommendation of the Faculty in each case, may vary any of the provisions of the Academic Program Rules for any particular award.